

House File 2077 - Introduced

HOUSE FILE 2077

BY SALMON

A BILL FOR

1 An Act relating to the printing and physical attributes of
2 ballots.

3 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

1 Section 1. Section 43.27, Code 2022, is amended to read as
2 follows:

3 **43.27 Printing of ballots.**

4 1. The text printed on ballots of each political party
5 shall be in black ink, on separate sheets of paper, uniform
6 in quality, texture, and size, with the name of the political
7 party printed at the head of the ballots, which ballots shall
8 be prepared by the commissioner in the same manner as for the
9 general election, except as provided in [this chapter](#). The
10 commissioner may print the ballots for each political party
11 using a different color for each party. If colored paper is
12 used, all of the ballots for each separate party shall be
13 uniform in color.

14 2. Ballots shall be printed on unique, controlled-supply
15 watermarked clearing bank specification 1 security paper with
16 all of the following characteristics:

17 a. Secure holographic foil that is a minimum of ten square
18 millimeters and a maximum of twenty square millimeters with
19 a proprietary original image in visible and multiple-color
20 invisible ultraviolet inks. The visible overprint must be
21 translucent so that the hologram image strikes through the
22 printed image when viewed at different angles and must be cured
23 in such a way that any tampering of the image causes visible
24 damage to the hologram. The holographic foil design and
25 origination artwork must be exclusively owned and controlled
26 by the security printer.

27 b. Branded overprint of any hologram that personalizes the
28 hologram with customer logo.

29 c. Custom complex security background designs with
30 banknote-level security.

31 d. Secure variable digital infill.

32 e. Thermochromic, tri-thermochromic, photochromic, or
33 optically variable inks.

34 f. Stealth numbering in ultraviolet, infrared, or taggant
35 inks.

1 g. Two-color rainbow print invisible ultraviolet numismatic
2 designs with fine line security relief design that follows the
3 primary image's design exactly and with a minimum line weight
4 of four hundred twenty-four ten thousandths millimeters.

5 h. Unique forensic fraud detection technology that is built
6 into security inks.

7 i. Invisible ultraviolet microtext with an ultraviolet image
8 minimum height of three-tenths millimeters and maximum height
9 of five-tenths millimeters.

10 j. Raster imaging printed on seventy-five percent of the
11 document face in a minimum two-color invisible ultraviolet
12 ink with a minimum line weight of two hundred forty-two
13 ten thousandths millimeters and a maximum line weight of
14 eighty-four thousandths millimeters.

15 k. Three-color invisible ultraviolet guilloche with an
16 anticopy feature that is a custom geometric design specific to
17 the document and with a high level of secure fine line detail
18 consisting of multiple line weight and a minimum line weight of
19 two hundred forty-two thousandths millimeters.

20 l. Visible colored overt ink with embedded covert, near
21 infrared machine-readable taggant that is capable of detection
22 through proprietary infrared wavelength light source excitation
23 and related infrared wavelength emission characteristics that
24 confirm authenticity through a complex temporal measurement
25 when read by a handheld, rechargeable, battery-operated
26 proprietary detector.

27 m. Molecular level, forensic-covert security feature
28 included in the infrared tagged ink prescribed in paragraph
29 "l". The proprietary molecular marker must be authenticated by
30 laboratory analysis using gas chromatography mass spectrometry
31 and the concentration in the related ink cannot be more than
32 one part per million.

33 n. Microprinting that requires banknote graphics software
34 and protects infill areas from fraudulent alterations.

35 o. Multicolor invisible primary fluorescent elements that

1 are printed in register to create a rainbow effect background.
2 The image must incorporate multiple security graphic techniques
3 and must be generated using anticounterfeit design software
4 that is commercially available only for approved and accredited
5 printers.

6 p. Serialized black quick response code in which the same
7 code is printed on the top left corner and bottom right corner
8 and that can be read by native quick response functions on
9 personal electronic devices that redirect the voter to an
10 internet-based voter information page and that tracks the
11 voter's ballot as it is processed.

12 q. Paper that is eight and one-half inches wide by twenty-
13 two inches long and that weighs eighty grams per square meter.

14 r. A paper receipt for the voter that is a perforated
15 portion of the ballot that is suitable for the voter to remove
16 from the ballot after completing the ballot and that contains
17 the lot number and sequence number of the sheet of paper on
18 which the ballot is printed.

19 3. A vendor that provides fraud countermeasures that are
20 contained in or on the paper used for ballots shall be ISO
21 27001 certified, ISO 17025 certified, ISO 45001 certified,
22 ISO 14001 certified, ISO 14298 certified, or ISO 9001:2015
23 certified.

24 Sec. 2. Section 49.57, subsection 1, Code 2022, is amended
25 to read as follows:

26 1. ~~They~~ The ballots shall be on unique, controlled-supply
27 watermarked clearing bank specification 1 security paper
28 uniform in color, through which the printing or writing cannot
29 be read, with all of the following characteristics:

30 a. Secure holographic foil that is a minimum of ten square
31 millimeters and a maximum of twenty square millimeters with
32 a proprietary original image in visible and multiple-color
33 invisible ultraviolet inks. The visible overprint must be
34 translucent so that the hologram image strikes through the
35 printed image when viewed at different angles and must be cured

1 in such a way that any tampering of the image causes visible
2 damage to the hologram. The holographic foil design and
3 origination artwork must be exclusively owned and controlled
4 by the security printer.

5 b. Branded overprint of any hologram that personalizes the
6 hologram with customer logo.

7 c. Custom complex security background designs with
8 banknote-level security.

9 d. Secure variable digital infill.

10 e. Thermochromic, tri-thermochromic, photochromic, or
11 optically variable inks.

12 f. Stealth numbering in ultraviolet, infrared, or taggant
13 inks.

14 g. Two-color rainbow print invisible ultraviolet numismatic
15 designs with fine line security relief design that follows the
16 primary image's design exactly and with a minimum line weight
17 of four hundred twenty-four ten-thousandths millimeters.

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19 into security inks.

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24 document face in a minimum two-color invisible ultraviolet ink
25 with a minimum line weight of two hundred forty-two thousandths
26 millimeters and a maximum line weight of eighty-four
27 thousandths millimeters.

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31 consisting of multiple line weight and a minimum line weight of
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33 l. Visible colored overt ink with embedded covert, near
34 infrared machine-readable taggant that is capable of detection
35 through proprietary infrared wavelength light source excitation

1 and related infrared wavelength emission characteristics that
2 confirm authenticity through a complex temporal measurement
3 when read by a handheld, rechargeable, battery-operated
4 proprietary detector.

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10 one part per million.

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20 code is printed on the top left corner and bottom right corner
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24 voter's ballot as it is processed.

25 q. Paper that is eight and one-half inches wide by twenty-
26 two inches long and that weighs eighty grams per square meter.

27 r. A paper receipt for the voter that is a perforated
28 portion of the ballot that is suitable for the voter to remove
29 from the ballot after completing the ballot and that contains
30 the lot number and sequence number of the sheet of paper on
31 which the ballot is printed.

32 Sec. 3. Section 49.57, Code 2022, is amended by adding the
33 following new subsection:

34 NEW SUBSECTION. 8. A vendor that provides fraud
35 countermeasures that are contained in or on the paper used for

1 ballots shall be ISO 27001 certified, ISO 17025 certified, ISO
2 45001 certified, ISO 14001 certified, ISO 14298 certified, or
3 ISO 9001:2015 certified.

4

EXPLANATION

5

The inclusion of this explanation does not constitute agreement with
6 the explanation's substance by the members of the general assembly.

6

7 This bill relates to the printing of ballots. The bill
8 requires each ballot to be printed on unique, controlled-supply
9 watermarked clearing bank specification 1 security paper and
10 includes a number of security measures enumerated in the bill.
11 The bill also requires a vendor that provides ballot security
12 measures to hold one or more security-related certifications.